



STATE OF MARYLAND

DHMH

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Office of Preparedness & Response

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November 9, 2007

Public Health & Emergency Preparedness Bulletin: # 2007:44 **Reporting for the week ending 11/03/07 (MMWR Week #44)**

CURRENT HOMELAND SECURITY THREAT LEVELS

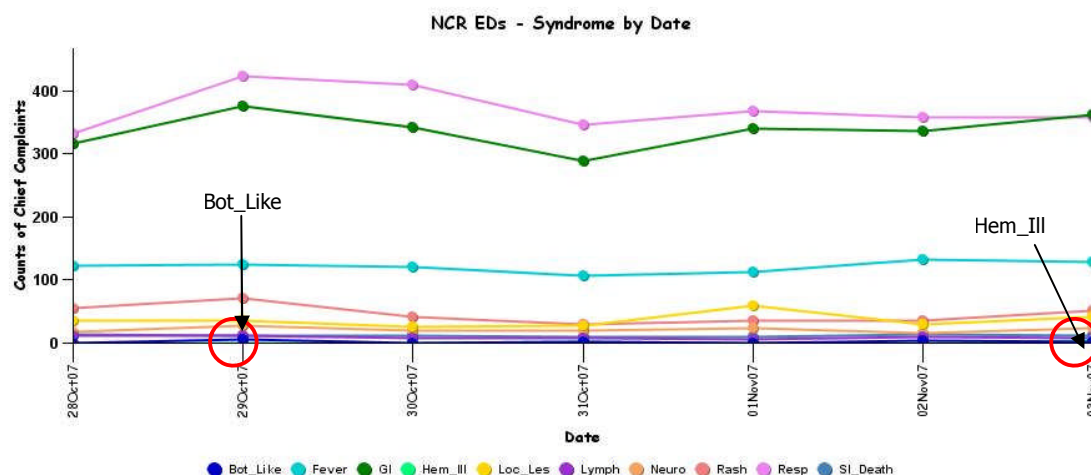
National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

SYNDROMIC SURVEILLANCE REPORTS

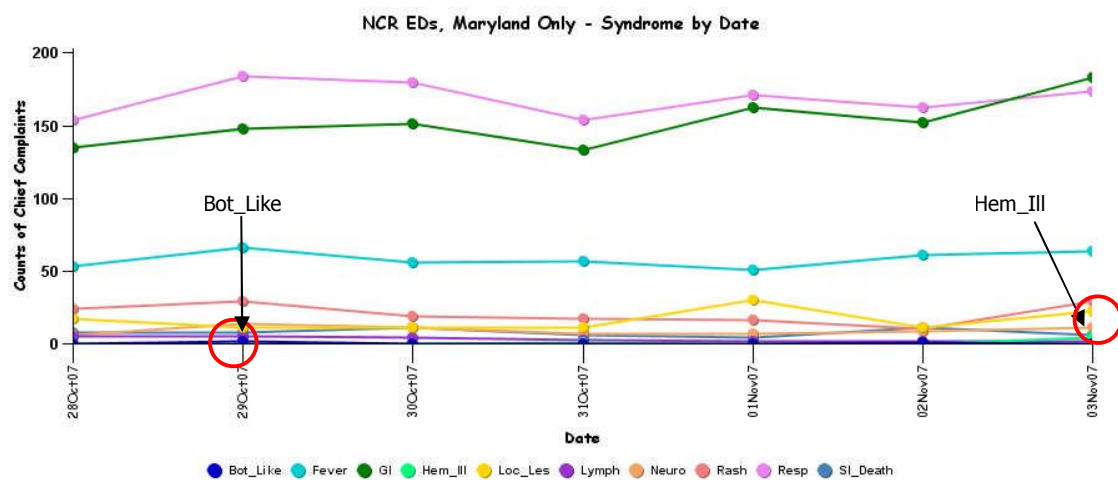
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

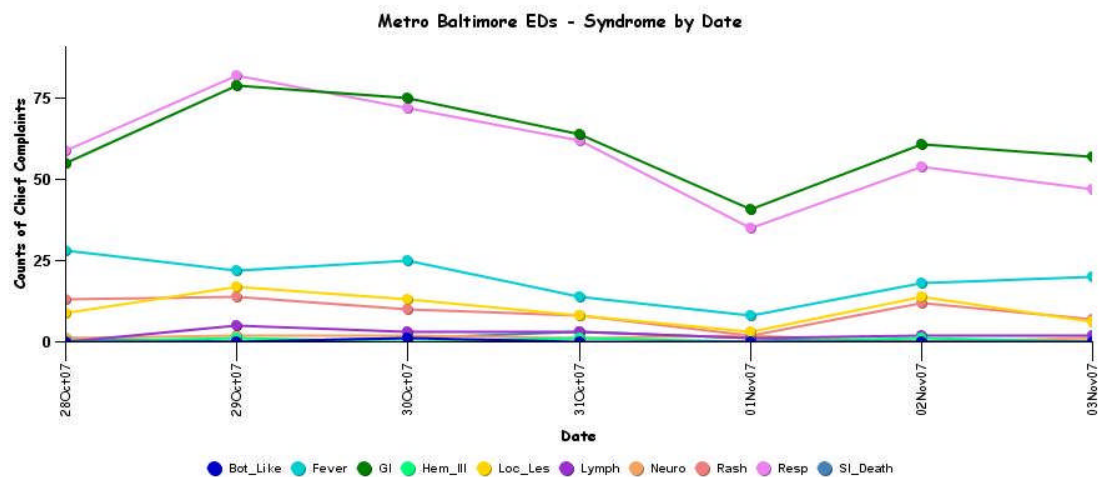
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system

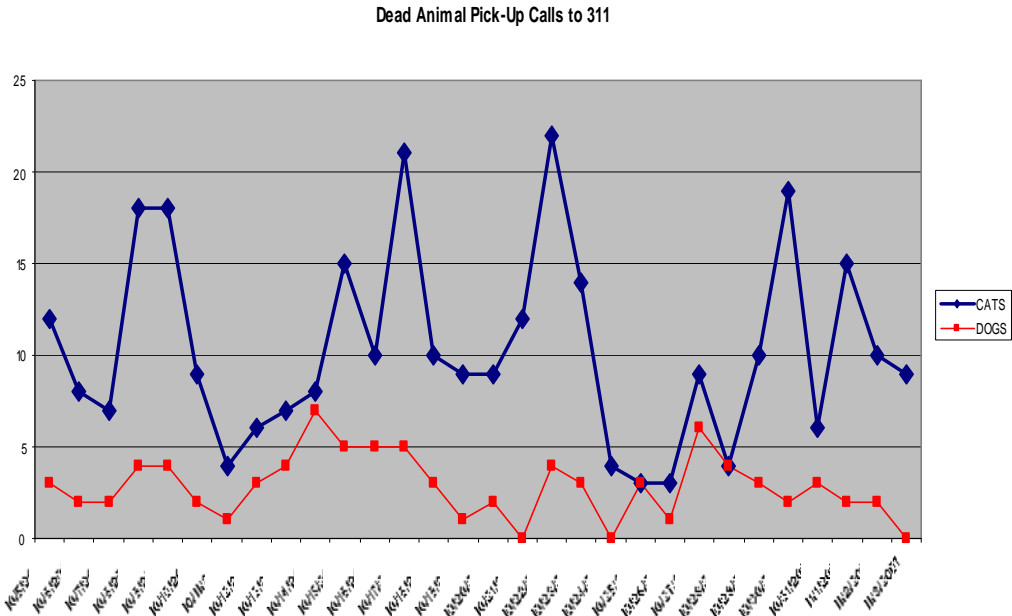


* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

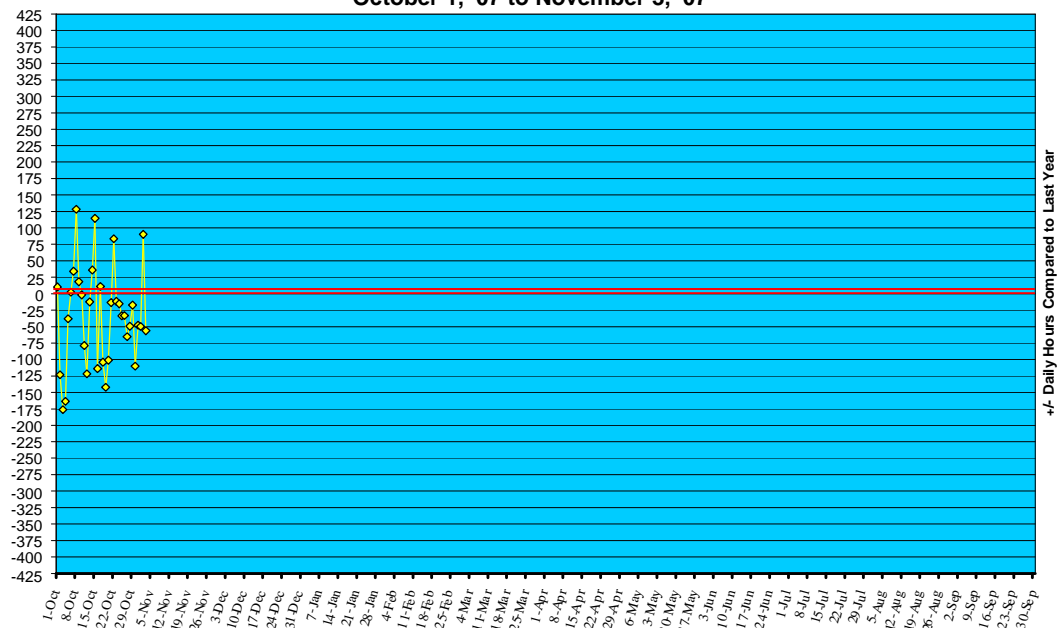
BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '07 to November 3, '07



REVIEW OF MORTALITY REPORTS

OCME: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in September 2007 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases:	22	0
Prior week:	12	0
Week#44, 2006:	16	0

OUTBREAKS: 2 outbreaks were reported to DHMH during MMWR Week 44 (Oct. 28- Nov. 3, 2007):

1 Respiratory illness outbreak

1 outbreak of PNEUMONIA associated with an Assisted Living Facility

1 Rash illness outbreak

1 outbreak of MRSA associated with a School

MARYLAND SEASONAL FLU STATUS:

Seasonal Influenza reporting occurs October through May. One case of influenza was reported to DHMH during MMWR Week 44 (October 28 – November 3, 2007). However, based on surveillance definitions, there are no lab confirmed influenza cases in Maryland to date this season.

***Please note:** Influenza data reported to DHMH through the National Electronic Disease Surveillance System (NEDSS) is provisional and subject to further review.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at:
<http://bioterrorism.dhmh.state.md.us/flu.htm>

WHO update: As of October 31, 2007, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 333, of which 204 have been fatal. Thus, the case fatality rate for human H5N1 is about 61%.

AVIAN INFLUENZA, HUMAN (Indonesia): 31 Oct 2007, The Ministry of Health of Indonesia has announced a new case of human infection of H5N1 avian influenza. A 3 year old boy from the Tangerang District, Banten Province, developed symptoms on Oct 14. The case has recovered. The investigation found that there were poultry deaths in the case's household prior to his onset of symptoms. The case was living in the same district but had no contact with the

previously confirmed 5 year old girl. Of the 111 cases confirmed to date in Indonesia, 89 have been fatal.

AVIAN INFLUENZA, POULTRY (Bangladesh, Pakistan, Viet Nam): 3 Nov 2007, Officials in Bangladesh, Pakistan, and Viet Nam have reported new outbreaks of H5N1 avian influenza in poultry this week. In Bangladesh, an official from the government's livestock department said the H5N1 virus was detected at 3 farms in the northern part of the country. Workers culled about 6000 chickens, which were buried over the last 2 days, the report said. The country's last reported H5N1 outbreak occurred in May 2007, according to an Office International des Epizooties (OIE; World Organization for Animal Health) report. Meanwhile, a livestock official in Pakistan said yesterday that 45 000 chicks at a breeding operation in the North West Frontier Province were destroyed and buried after a laboratory in Islamabad identified the H5N1 virus in samples from the flock. According to OIE reports, Pakistan's last poultry outbreak occurred in July 2005. Elsewhere, veterinary officials in Viet Nam reported 2 more H5N1 outbreaks in ducks. An outbreak that began on Oct 29 in southern Viet Nam's Tra Vinh province struck a flock of 2-month-old ducks, killing 400 and sickening 500, the report said. On Oct 28, an H5N1 outbreak killed 210 of 400 ducks at a household in northern Viet Nam's Nam Dinh province. According to OIE reports, Viet Nam had 6 H5N1 outbreaks in October 2007, all involving unvaccinated ducks. Besides Tra Vinh and Nam Dinh, affected provinces included Cao Bang in the north and Quang Tri in central Viet Nam. Before October, Viet Nam's last reported outbreaks occurred in August 2007.

AVIAN INFLUENZA, HUMAN (Indonesia): 3 Nov 2007, A 30 year old Indonesian woman died of suspected bird flu on Nov 3, the country's Health Ministry said here. The woman from Tangerang town on the outskirts of Jakarta died in a designated bird flu hospital of Persahabatan in east Jakarta, said Harris Subiantoro, an official of the anti-bird flu center of the Ministry. One of 2 laboratories' tests, which are needed for confirmation, indicated that she was positive for avian influenza, said the official. "One of laboratory tests has showed positive," he told Xinhua. The woman had history of contact with some of hundreds chickens that suddenly died last month in her residence, he said. "She had contact with dead chickens belonging to her neighbors," said Subiantoro. If the woman's case is confirmed, it will raise the death toll to 90 out of 112 cases in the bird flu hardest-hit country, he said. The woman began to exhibit signs of avian influenza virus infection on Oct 23 and went to clinics 5 days later in the town, said the official. She was admitted to a hospital in Tangerang town on Oct 30 and was shifted to Persahabatan hospital in East Jakarta one day later, said Subiantoro.

NATIONAL DISEASE REPORTS:

EASTERN EQUINE ENCEPHALITIS, EQUINE (Indiana): 29 Oct 2007, A total of 24 horses in 17 Indiana counties have tested positive for a mosquito borne viral encephalitis that also can sicken humans, state officials said on Oct 24. Horses have tested positive for eastern equine encephalitis (EEE) in the following counties: Adams, Boone, Daviess, Decatur, DeKalb, Elkhart, Hendricks, Howard, Jay, Kosciusko, LaGrange, LaPorte, Noble, Putnam, Rush, Steuben, and St. Joseph. It's the widest dispersion of the virus in Indiana in recent memory, said Dr. Sandra Norman, equine director for the Indiana State Board of Animal Health. "Typically, in years when we receive reports of EEE, we see them clustered in the most northern counties in Indiana, particularly on the western side of the state," Norman said. Because the virus is carried by mosquitoes, the state is likely to receive new positive test results for the virus until freezing temperatures kill off the flying pests, she said. Eastern equine encephalitis causes incurable central nervous system problems in horses. Humans also are susceptible to the virus, but not via horses. Mosquitoes must feed from infected birds to spread the virus to humans. (Viral encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

E. COLI O157, FROZEN PIZZA, RECALL (Multi State): 1 Nov 2007, Almost 5 million Totino's and Jeno's frozen pizzas with pepperoni toppings are being recalled because the pepperoni may be contaminated with E. coli, General Mills Inc said on Nov 1. General Mills, which owns the Totino's and Jeno's brands, said the recall affects about 414,000 cases of pizza products currently in stores and all similar pizza products that might be in consumers' freezers. Each case contains 12 pizzas. The possible E. coli contamination was uncovered by state and federal authorities investigating 21 E. coli related illnesses in 10 states. General Mills said 9 of the 21 people reported having eaten Totino's or Jeno's pizza with pepperoni topping at some point before becoming ill. E. coli O157:H7 is a potentially deadly bacteria that can cause bloody diarrhea and dehydration. The very young, old, and people with compromised immune systems are the most vulnerable to foodborne disease. General Mills said the earliest case reported to authorities occurred on Jul 20, and the latest case reported occurred on Oct 10. The recall includes 8 types of Totino's brand frozen pizza and 3 types of Jeno's brand frozen pizza with pepperoni topping, or pepperoni in combination with other toppings. The frozen pizzas were produced in its Wellston, Ohio plant and distributed throughout the USA. General Mills has ceased shipment of all frozen pizza products that contain pepperoni and has announced a voluntary recall. Company officials are working closely with CDC, USDA-FSIS, FDA, and state health and agricultural departments to identify the source of the contamination. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

BOTULISM, AVIAN, SUSPECTED (Michigan): 2 Nov 2007, Dead birds are washing ashore in Antrim County, and environmental scientists suspect botulism associated with invasive mussels is to blame. Beachgoers recently have spotted dozens of loon and grebe carcasses littering beaches along the eastern shore of Grand Traverse Bay. The disease has killed thousands of birds in the Great Lakes region in recent years. Nearly 3000 gulls, grebes, and red-breasted mergansers turned up on beaches along a 12 mile stretch of Sleeping Bear Dunes National Lakeshore in November 2006. They died from type E botulism, a neuromuscular disease caused by bacteria. The birds had eaten fish that carried the toxin, biologists said. More than 52,000 bird deaths around the Great Lakes have been attributed to the same botulism

strain since 2002 in addition to the Sleeping Bear Dunes birds, the US Environmental Protection Agency says. The Michigan Department of Natural Resources collected 20 bird carcasses this week (Oct 29-Nov 2) from the beach a couple of miles north of Elk Rapids. They will be tested for botulism, said Tom Cooley, a biologist with the DNR's wildlife disease laboratory. Scientists believe zebra and quagga mussels, which invaded the Great Lakes in the 1980s, may filter the bacteria and pass it up the food chain to fish such as the round goby, which in turn are prey for aquatic birds. "It's an easy way for the birds to be exposed to the bacteria," Cooley said. (Botulism is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS:

FOODBORNE ILLNESS, HUMMUS (Jordan): 29 Oct 2007, Health authorities said the situation was improving with only dozens of new cases admitted on Oct 28, raising the total number of suspected food poisoning cases in northern Jordan's Jerash Governorate to 338. Yousef Qoqazeh, director of Jerash Public Hospital, was quoted as saying that only 10 citizens were still receiving treatment in the hospital out of the 52 who were admitted on Oct 27. "The patients' conditions are stable and they are expected to be discharged within 24 hours," said Qoqazeh. On Oct 26, hundreds of residents in the village of Sakeb, suffering from fever, diarrhea, and vomiting, were rushed to Jerash Public Hospital with authorities initially blaming the problem on food poisoning from a local restaurant, which was closed down as a precautionary measure. Health authorities are investigating the possibility of an outbreak of salmonella or cholera. Jerash governor, Ali Azzam, said initial tests carried out on potable water samples taken from the village turned out negative. "We also sent hummus and water samples to the National Laboratories in Amman and to the King Abdullah I Hospital in Irbid to carry out more sophisticated tests to determine the cause of the incident," he said, adding that results normally need 48 to 72 hours. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, HUMAN, LIVESTOCK (Indonesia): 30 Oct 2007, An official said on Oct 30 that 3 villages in Indonesia's east have been closed off to outsiders after more than 750 people fell ill from eating anthrax-infected buffalo meat. "We've now recorded 761 people from 3 villages falling ill after eating buffalo meat infected with anthrax," said local official Cornelis Wara from Ende district, one of the affected areas on Flores Island. A veterinary official, Maria Geong, said more teams had been sent to the district to locate and vaccinate livestock, reinforcing several sent at the weekend (Oct 27-28) after 20 villagers were initially reported ill. "We have sent 20,000 doses of vaccine to the 3 villages and several areas in Ende district," she said, adding that another 20,000 doses had also been sent to adjacent Sikka district to contain the spread of the disease. In April 2007, 5 people died after consuming infected beef on nearby Sumba Island. Health officials sealed off a number of villages there for several weeks to contain the disease. Flores and Sumba are in East Nusa Tenggara province, where anthrax is endemic. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

CHOLERA, DIARRHEA (Nepal): 31 Oct 2007, The Nepalese government on Oct 31, sounded the alarm on the recurring diarrhea outbreak in the region, with over 200 people killed and 16,162 cases reported in the first 6 months of 2007 alone. According to Dr Manas Kumar Banerjee, project coordinator of Avian Influenza Control Project under the Epidemiology and Disease Control Unit (EDCU), the government would implement a massive campaign and operational research throughout the region to determine the causes behind the "focal epidemic". "As such cases have been recurring in Kalikot for a long time, the main focus of the study will be in the area," stressed Banerjee. The doctor claimed that the outbreak was mainly due to flooding, landslide, and rainfall. He explained that 80 to 90 per cent of the problem was due to contaminated drinking water and 10 to 20 per cent of the cases due to the consumption of bacteria-contaminated food. Other identified critical areas for the deadly cholera include Kathmandu and Nepali districts like Saptari, Rautahat, Chitwan, Humla, Dhanusa, Mahottari, and Terai. "Such recurrences have posed a challenge to the government. The cases have been spreading but it could be brought under control if the people pay attention to their daily routines, sanitation, and drinking water," Dr Banerjee said. Poor economic condition in remote communities and lack of professionals to advise people on health and safety are also big contributing factors in the outbreak. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHOLERA, REFUGEE CAMPS (Democratic Republic of Congo): 1 Nov 2007, A cholera outbreak in Congo's eastern city of Goma is raising fears of an epidemic among tens of thousands of refugees in camps, aid workers said on Nov 1. Fighting between government soldiers, Tutsi insurgents, Rwandan Hutu rebels, and local Mai Mai militia has forced more than 370,000 to flee villages in North Kivu province in 2007 alone. More than 45,000 displaced people now live in 5 overcrowded camps on the edge of Goma where aid agencies are struggling to maintain minimum hygiene standards. The medical charity Medecins Sans Frontieres (MSF) said it recorded 533 cases of cholera at health centers it supports, in both the camps and Goma, over the past 6 weeks. "The main crisis is in the camps around Goma," said Patrick Lavand'homme, head the UN Office for the Coordination of Humanitarian Affairs in Goma. Some 189 cases were reported between Oct 24 and 28, mostly in the camps for the displaced, he said. 3 people have died from the disease so far, MSF said. Leo Jansen, MSF-France's head of mission in eastern Congo, said that while the outbreak was manageable, it could soon flare out of control because refugees continue to flood in. "They're in a bad situation. They're susceptible to cholera. We've seen the number of cases double inside Mugunga camp in recent weeks." "We fear that the outbreak could be bigger than in other years." (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

E. COLI O157 (Iceland): 1 Nov 2007, From Sept 28 to Oct 22, 9 domestically acquired cases of Shiga toxin (Stx)-producing *E. coli* (STEC) O157 were diagnosed in Iceland, one of which is probably a secondary case. All except 2 were treated in hospital, one with elevated creatinine levels. No cases developed hemolytic uremic syndrome (HUS). The onset of symptoms was between Sept 23 and Oct 18. The cases reside in different parts of the country: 4 in the area of Reykjavik, 2 in the north of Iceland, one in the east of Iceland, and 2 in the Westman Islands. 8 of the 9 patients (presumed secondary case was excluded) answered a trawling questionnaire on food consumption, travel, and mass gathering; supermarket purchase records were collected from 3 cases. The results from the questionnaires showed that 7 had eaten fish or ham, and 6 had eaten lettuce. The source of infection is unknown at this point. 5 cases had eaten lettuce packaged and imported from the Netherlands, as verified either by questionnaire (3 cases) or by supermarket purchase records (2 cases). Intensified surveillance in lettuce with increased sampling began in mid-October 2007 and is ongoing. Culture results have so far been negative. The strain that caused the outbreak in Iceland was identified by the Laboratory of Enteric Pathogens at the Health Protection Agency in the United Kingdom as STEC O157, phage type 8, carrying the stx1 and stx2 shiga toxin genes. The PFGE pattern of all 9 Icelandic isolates was identical to the strain that caused the current STEC O157 outbreak in the Netherlands. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

E. COLI O157 (Netherlands): 1 Nov 2007, Early in October 2007, an increase in notifications of human cases infected with Shiga toxin (Stx)-producing *Escherichia coli* (STEC) O157 was seen in the Netherlands. All cases reported diarrhea, and most also had bloody diarrhea. No cases developed hemolytic uremic syndrome (HUS). The onset of illness for the first cases was in mid-September 2007. STEC O157 strains that contained both stx1 and stx2 genes were isolated from 36 patients. Subtyping of these isolates by pulse-field gel electrophoresis (PFGE) showed, for 33 cases, an identical pattern not previously observed in the Netherlands. One further isolate was nearly identical to the 33. The PFGE pattern was compared to the pattern found in Iceland, which appeared to be identical. As part of enhanced surveillance, all laboratory-confirmed STEC patients in the Netherlands are asked to fill in a questionnaire on symptoms and exposures in the week before illness onset. Questionnaires were available for 31 cases of the current outbreak and 37 STEC cases that had occurred earlier in 2007. A case-to-case comparison revealed raw vegetables as the possible source of the outbreak (71 per cent of the outbreak cases had consumed raw vegetables, compared with 49 per cent of the earlier cases, $p=0.06$). Municipal health services undertook further trawling interviews with the current outbreak cases, which pointed towards pre-packaged shredded iceberg lettuce purchased at several supermarket chains as the possible source. The environmental investigation is continuing. The Dutch Food and Safety Authority (FSA) is investigating the distribution channels of packed fresh vegetables and the individual ingredients. Samples of lettuce and other raw vegetables are being taken, as well as environmental samples at vegetable growers and shredding plants that may be involved. One shredding company for fresh vegetables also cuts and packs lettuce products for Iceland. An alert was sent by the Dutch FSA to the Rapid Alert System for Food and Feed on Oct 26. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHOLERA (Viet Nam): 2 Nov 2007, In the past, Viet Nam had small and scattered diarrhea epidemics. The current diarrhea epidemic is the most dangerous so far, said Nguyen Quang Thuan, director of the Media Centre of the Health Ministry. By the end of Nov 1, around 200 patients of acute diarrhea were hospitalized and 36 of them were reported as "dangerous acute diarrhea" by the Health Ministry. In Hanoi, the disease attacked 12 of 14 districts, mainly Hoang Mai and Thanh Tri. Head of the Preventive Health Agency Nguyen Huy Nga said that the epidemic is more easily spread in Hanoi's suburbs where most people don't have access to tap water. The agency has asked water supply plants in the city to increase chlorine to ensure clean water. In the coastal city of Hai Phong, the disease has appeared in the districts of Le Chan, Hong Bang, Ngo Quyen, and Kien Thuy with 4 "dangerous acute" cases detected on Nov 1. Thuan said that the Health Ministry hasn't announced this as a national epidemic yet because it is currently restricted to only 5 Northern provinces, Hanoi, Ha Tay, Vinh Phuc, Hai Phong, and Hung Yen only. The Health Ministry issued guidance for diagnosis and treatment of this disease. It is caused by *Vibrio cholerae*. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

*Cases and outbreaks will be cited for suspect level with regards to suspicion of BT threat. Therefore, cases and outbreaks will be categorized as "Determined BT", "Suspect" or "Non-suspect".

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://bioterrorism.dhmm.state.md.us/>

Updated Information on Current Salmonella Outbreak Associated with Frozen Pot Pies

CDC is collaborating with public health officials in multiple states across the United States and with the U.S. Department of Agriculture's Food Safety and Inspection Service to investigate an ongoing multi-state outbreak of *Salmonella* I 4,[5],12:- infections in humans. (<http://www.cdc.gov/salmonella/4512eyeminus.html>)

Updated Information on Current Outbreak of E. coli O157 Associated with Frozen Pepperoni Pizza

The Tennessee State Department of Health and CDC are collaborating with public health officials in multiple states and the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA-FSIS) to investigate an ongoing multistate outbreak of *E. coli* O157:H7 infections in humans. (<http://www.cdc.gov/ecoli/2007/october/103107.html>)

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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